IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:10/659,090	Confirmation No.:2724
Applicant	:Christopher J. Nagel	
Filed	:September 10, 2003	
TC/A.U.	:1751	
Examiner	:Mark T. Kopec	
Docket No.	:2751.2001 US2	
Title:	COMPOSITION OF MATTER TAILORING: SYSTEM I	

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or is being facsimile transmitted to the United States Patent and Trademark Office on:

August 16, 2006 — Date

Signature

Lorraine Miller Doyle

Typed or printed name of person signing certificate

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 CFR 1.132

Sir:

I, Christopher J. Nagel, of 28 Highland Circle, Wayland MA 01778, am the sole inventor of the above identified application. I am the sole inventor of the above identified patent application.

I am attaching a detailed description of each of the analytical techniques described in this declaration and in my Declaration under 37 CFR 1.132 filed on March 23, 2006. These techniques were performed by third party companies to confirm the change in matter achieved through tailoring (Exhibit 1). GDMS was obtained from SHIVA Technologies of Syracuse, New York; XRF was obtained from the University of Western Ontario, London, Ontario; PIXE was obtained from Elemental Analysis Incorporated,

Lexington, Kentucky; and GDOES was obtained from Twin Analytical of Independence, Ohio.

I have been asked to clarify the process of manufacture for the copper samples described in my earlier Declaration under 37 CFR 1.132. The copper sample in the declaration, as are the samples described herein, refer to the ingot number of the sample. Copper 14-00-01 corresponds to Example 11 of the present application.

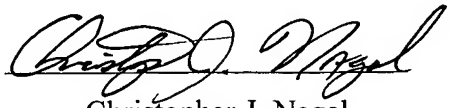
As explained previously, third party data confirms that the manufactured copper ingot contains a different elemental signature from naturally occurring copper (Exhibit 3) and my earlier Declaration. To show that the process of the present invention is not unique to copper, I am also attaching third party data for the following elements: aluminum (Exhibit 4), silicon (Exhibit 5), iron (Exhibit 6), nickel (Exhibit 7), and cobalt (Exhibit 8) together with their respective experimental procedures. Please note that the aluminum example is not described in the current application, but rather in my copending application number 11/063,694. The aluminum ingot was produced in accordance with the methods described in these patent applications. The third party data confirmed the unique electronic characteristic of each tailored system. Please note that the spreadsheets in Exhibits 3-8 include GD-MS analyses of each of the starting materials. Further Exhibits 3-8 include the manufacturer's specifications of the starting materials for each system.

I have been asked to provide visual support for the teachings in the specification of the magnetic properties of the tailored copper produced by the present process. I am attaching six photographs of the tailored copper ingot 14-00-01, corresponding to Example 11 of the present specification, (Exhibit 2). I personally observed the magnetic properties described in the slides of Exhibit 2.

I have been asked to analyze a "magnetic copper" sample obtained from Goodfellow Cambridge Limited. As shown in Exhibit 2, the photographs reveal the presence of iron impregnated in copper. In my opinion, the substantial presence of iron creates the magnetic property. Therefore, it is my opinion that the material is not copper substantially free of other metals.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further

that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



Christopher J. Nagel